

Work Order ID 56303

February 17, 2010 2:29:09 PM



Page 1

Item ID: D2065

Accept



Setup Start



Revision ID:

Stop



Item Name: Arm

Start Date: 2/17/10

Start Qty: 6.00



Cust Item ID:

Required Date: 2/24/10

Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2065

Rev C

100

0.00



Small Fab

Small Fab

Memo

0.00

1-Punch 1/2" OD x .049" Wall 304/316 SS as per Dwg D2065 (per D2727) using DT8012.
Note: 1 end only
2-Cut to length as per Dwg D2065
3-Form as per Dwg D2065 and template DT8251
4-Drill 0.188" Dia holes as per Dwg D2065 using drill jig DT8779 and template

M-1

6X

10/03/10

110

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

Subs 12

16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 56303

February 17, 2010 2:29:10 PM

Page 2

Item ID: D2065

Revision ID:

Item Name: Arm

Start Date: 2/17/10

Start Qty: 6.00

Required Date: 2/24/10

Req'd Qty: 6.00

Reference:

Accept

Setup Start

Stop

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

Black Sandtex(Ref:4.3.5.7) per QS1005 4.3

0.00



Powdercoat

Powder Coating

M105642

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:00
320°
11:30

0.00

BR 10-3-15

⑥ φ

130

QC3- Inspect Part Finish

0.00



QC

Quality Control

Memo

0.00

Rec'd 3/16 ⑥

140

Identify as per dwg & Stock Location: 229

0.00



Packaging

Packaging

Memo

0.00

Rec'd 3/16 ⑥

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 56303

February 17, 2010 2:29:10 PM



Page 3

Item ID: D2065

Revision ID:

Item Name: Arm

Start Date: 2/17/10

Start Qty: 6.00

Required Date: 2/24/10

Req'd Qty: 6.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/03/17 *[Signature]*
ME 10-3-16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

February 17, 2010 2:29:14 PM

Page 1

Work Order ID: 56303

Parent Item: D2065

Parent Item Name: Arm


Comments: IPP: E 02.04.15 Added Dwg Rev.B1 NG
IPP Rev:F 08-07-24 revC as per dwg (ecn 08-504) DD verified by:EC

Start Date: 2/17/10

Required Date: 2/24/10

Start Qty: 6.00

Required Qty: 6.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| M304TR0.500W.049 | | Purchased | No | | | 120 | f | 54.2152 | 10.7368 | | | |
|  | | | | | | | | | | | | |
| 304 RD Tube .500 x .049W | | | | | | | | | | | | |

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | | |
| MAT | 54.2151895 | |
| 111814 | 54.2151895 | |

mk
12/03/10

10.7368

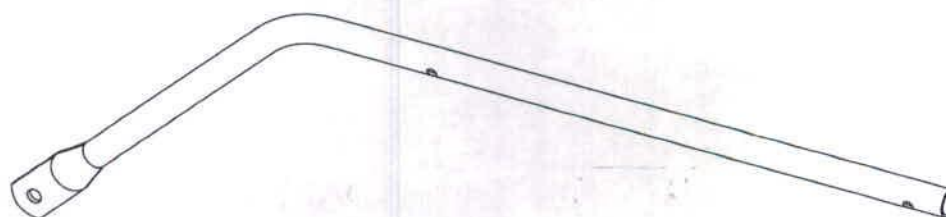
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



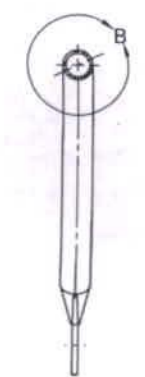
D2065 ARM

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 54303
BP10-2-17

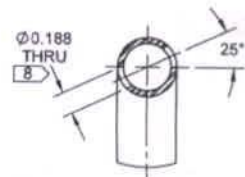
RELEASED
08-07-25-17

| C | REDRAWN IN SOLIDWORKS, INCORPORATED REV. B1 (FINISH ADDED VIA HAND CHANGE) (ZN A5-2); ADD D2065F CUT LENGTH DETAIL FOR D2065 (ZN B3-2); ADD R1.50 DIMENSION (ZN D5-2); Ø0.500 X 0.049 WALL WAS Ø0.500 X 0.035 WALL (ZN A5-2); REASON: Ø0.500 X 0.035 WALL TUBING USED ON D2010 IS CRACKING DURING SERVICE | PH | 08.06.13 |
|------------|---|--|--------------|
| B | RE-DESIGN | BW | 06.02.06 |
| A | NEW ISSUE | BW | 92.03.12 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | BW | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | PH | | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D2065 | SHEET 1 OF 2 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | ARM | NTS |
| DATE | 08.06.13 | COPYRIGHT © 1992 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON OR ENTITY WITHOUT PERMISSION FROM DART AEROSPACE LTD. | |

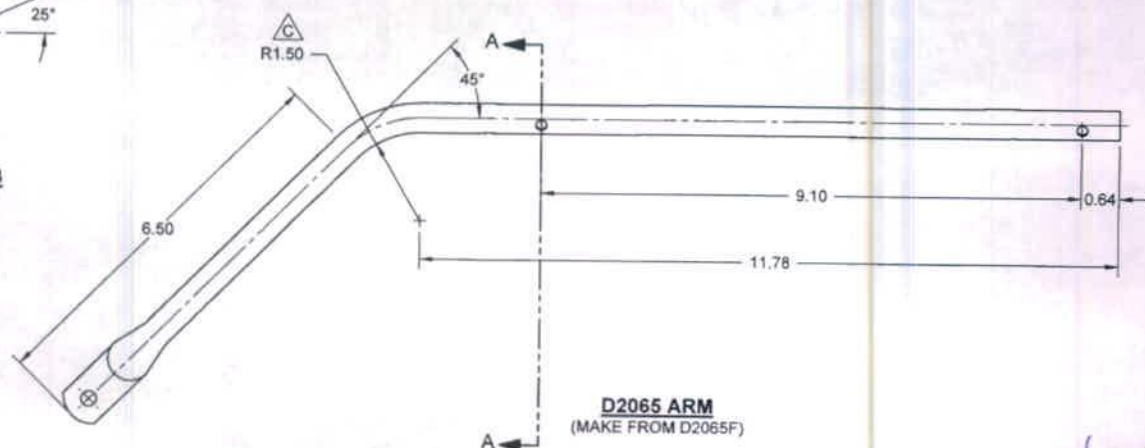
8 7 6 5 4 3 2 1



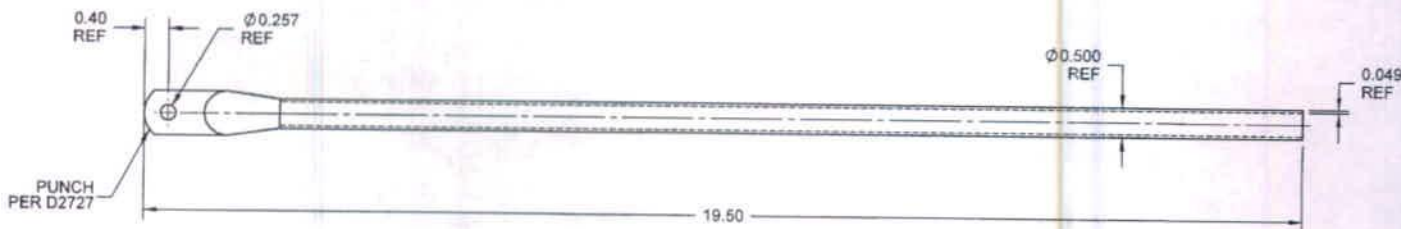
SECTION A-A



DETAIL B
SCALE 3X
2 PL



wlo 54303



D2065F ARM CUT LENGTH DETAIL



RELEASED
08.07.2014

NOTES:

- 1) MATERIAL: D2065F: AISI 304/316 SS SEAMLESS ROUND TUBING, $\phi 0.500 \times 0.049$ WALL (REF DART SPEC M304TR0.500W.049)
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.41 lbs
- 8) DRILL $\phi 0.188$ AFTER BENDING



| | | | |
|---|----------|--|--------------|
| DESIGN | BW | DART AEROSPACE LTD | |
| DRAWN | PH | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. C |
| MFG. APPR. | | D2065 | SHEET 2 OF 2 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | ARM | NTS |
| DATE | 08.06.13 | COPYRIGHT © 1992 BY DART AEROSPACE LTD | |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON OR ENTITY WITHOUT PERMISSION FROM DART AEROSPACE LTD. | | | |

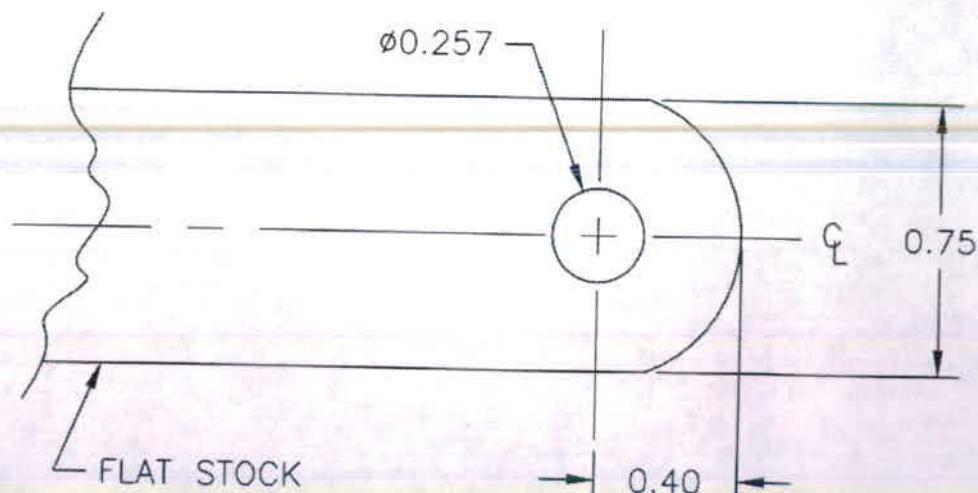
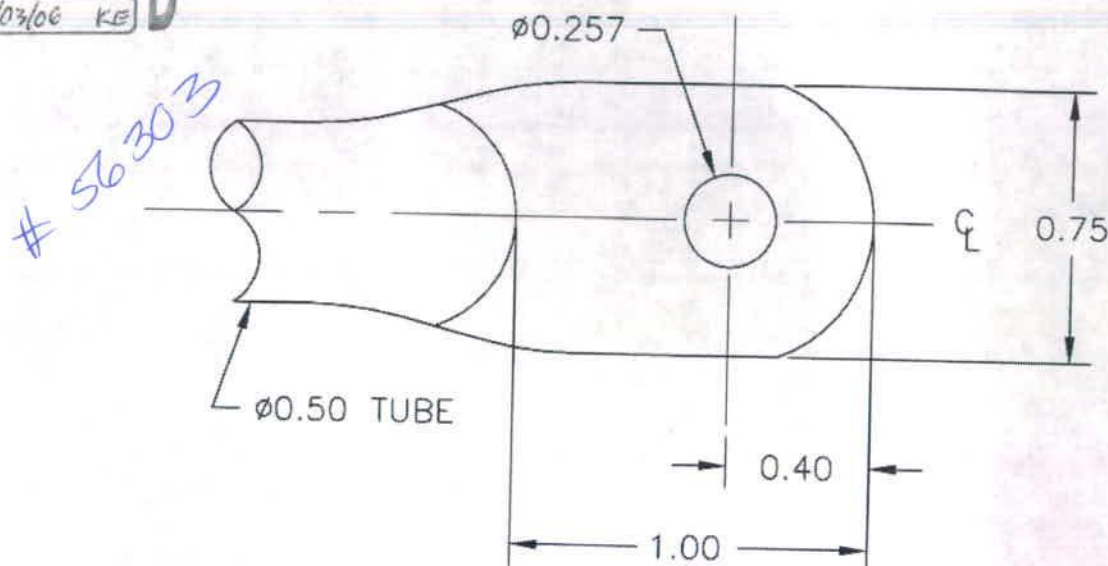
8 7 6 5 4 3 2 1



| | | | |
|------------------------|------------------------------------|--|------------------------|
| DESIGN KE | DRAWN BY KE | DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA | |
| CHECKED [Signature] | APPROVED [Signature] | DRAWING NO. D2727 | REV. A SHEET 1 OF 1 |
| DATE 97.11.24 | TITLE PUNCH DT8012 SPEC CONTROL | | SCALE 2:1 |
| A | 97.11.24 | NEW ISSUE | |
| A1 | #ICP 01.12.20 | ADD TOLERANCE NOTE | |

SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED
98/03/06 KE



NOTE: TOLERANCES ARE PER DART QSI DIB UNLESS OTHERWISE NOTED.



